## REMARKS

Favorable reconsideration by the Examiner is respectfully solicited in light of the above amendments and the remarks which follow.

The present invention relates to a nonwoven fabric having improved physical performance and aesthetics, and in particular, to a fabric having aesthetically pleasing tactile properties, commonly referred to as softness or a "soft hand". The present invention achieves these properties without sacrifice in other desirable properties, such as abrasion resistance.

The nonwoven fabric of the present invention is of a multilayer construction and includes a first fibrous web layer which defines one outer surface of the nonwoven fabric and a second fibrous web layer which defines the opposite outer surface of the fabric. The first fibrous web layer includes bicomponent or biconstituent fibers which include both a relatively higher fusion point first polymer and a lower fusion point second polymer. The second fibrous layer includes fibers of the relatively higher fusion point first polymer. A plurality of fusion bonds serve to bond the fibers of the first web and the fibers of the second web to form a coherent multilayer fabric. The fusion bonds are formed by passing the fabric through a calender nip defined between a smooth calender roll and a patterned calender roll. The bonds exhibit a relatively non-indented configuration on the surface where the first fibrous layer is present and exhibit a relatively indented embossed configuration on the opposite surface where the second fibrous layer is present.

In bonding the two layers together to produce the above-described fabric, the bonding is advantageously carried out by passing the fabric through a calender nip defined between a smooth calender roll and a patterned calender roll. The two rolls are preferably maintained at different temperatures, with the smooth roll being somewhat cooler than the patterned roll. When the unbonded layered webs are run through the calender nip, the fibrous layer containing the bicomponent or biconstituent fibers comes into contact with the smooth calender roll, which is at a reduced temperature, and the fibrous layer containing the higher fusion point polymer comes into contact with the patterned calender roll. This bonding process provides improved softness on the bicomponent or biconstituent fiber containing side of the fabric without sacrificing abrasion resistance.

In the Official Action, Claims 1-2, 6-8 and 15 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Yoshida et al. U.S. Patent No. 4,542,060. Yoshida discloses a nonwoven fabric comprising a ply A and a ply B that are joined together by a fluid entangling treatment and by a subsequent heat treatment. The ply A contains fibers that are not softened or melted during the heat treatment, and the patent specifically mentions rayon, polyester or polypropylene fibers. The ply B is mainly composed of thermoplastic fibers having a low softening and melting point, examples of which are nylon 6 fiber, polyethylene fiber, a sheath core conjugated fiber consisting of polypropylene core and a polyethylene sheath, a copolyester fiber, an undrawn polypropylene fiber and the like.

Contrary to what is stated by the Examiner in the Official Action, Yoshida does not disclose a nonwoven fabric that contains polypropylene fibers in one ply and polyethylene/polypropylene sheath core fibers in the other ply, with the plies being bonded together by discrete fusion point bonds. Specifically, in considering the examples given in Table 1, Examples 1-4 use a hot smoothing roll in the bonding operation and therefore do not produce a pattern of discrete bonds. Only Examples 5, 6 and 7 and reference Example 2 use an embossing roll. However, in Example 5, the ply A is a blend of 70% polyester (PET) fibers and 30% undrawn polypropylene fibers. In Example 6, ply A is a blend of 70% polypropylene fibers and 30% undrawn polypropylene fibers. In Example 7, the laminate consists of two outer plies (B) of 100% undrawn polypropylene fiber on opposite sides of a ply A which is a blend of 90% rayon fibers and 10% undrawn polypropylene fibers. Reference Example 2 is a single ply of 47% polyester (PET) fibers and 53% undrawn polypropylene fibers.

Thus, it is clear that the Yoshida et al. reference does not teach a nonwoven fabric laminate as claimed. Specifically, Claim 1 specifies that the first fibrous layer includes a component of a relatively higher fusion point first polymer and a second component of a lower fusion point second polymer, and wherein the second fibrous layer comprises fibers of the relatively higher fusion point first polymer. None of the examples describe a bonded nonwoven fabric laminate in which the higher melting polymer component of the bicomponent fibers is also used to form fibers in the second layer. Additionally, in Table 1 of Yoshida the only examples of

webs bonded by an embossing roll contain blends of fibers rather than bicomponent or biconstituent fibers.

Finally, the Yoshida reference gives no attention at all to the orientation of the smooth calender roll and the embossing roll. There is no teaching or suggestion of producing a nonwoven fabric wherein the bonds are formed by passing the fabric through a calender nip defined between a smooth calender roll and a patterned calender roll, and wherein the bonds exhibit a relatively non-indented configuration on the surface containing bicomponent fibers and a relatively indented embossed configuration on the opposite surface.

For the foregoing reasons, it should be clear that each of the independent claims as now presented is novel with respect to the Yoshida et al. reference. Furthermore, the differences between Applicant's claimed nonwoven fabric structure and that taught by the Yoshida reference would not have been obvious to a person of ordinary skill in the art. Yoshida contains no teaching or suggestion of the specific combination of fabric layers, bond structure and bond orientation as set forth in the claims of record. Moreover, the specific aspects of Applicant's invention as defined in the claims of record is not obvious from the Yoshida reference alone or in combination with any of the other patents of record in this application.

The claims as now presented also patentably distinguish over Kaiser et al. U.S. Patent No. 5,491,016. Kaiser discloses a fabric comprising outer layers of polypropylene staple fibers and an inner layer comprising heat shrinkable bicomponent fibers. In this construction, the bicomponent fiber web is buried within the nonwoven fabric laminate. This is an important aspect of the Kaiser et al. invention since the heat shrinkable bicomponent fibers are insulated by the outer layers and do not shrink during calendaring. *See Col. 3, lines 21-37.*

The Kaiser et al. reference does not disclose or suggest a nonwoven fabric as claimed, which includes a first fibrous layer defining one outer surface of the fabric and a second fibrous layer defining an opposite outer surface of the fabric, and wherein the first fibrous layer which defines the one outer surface of the fabric comprises bicomponent or biconstituent fibers. Nor is there any teaching or suggestion of constituting the two layers in such a way that the second layer comprises fibers of the same higher fusion point first polymer that is present in the bicomponent or biconstituent fibers of the first layer. The Kaiser reference also fails to teach or

suggest the specific orientation of the bond sites as set forth in the claims. In particular, the claims specify that the bonds exhibit on the surface containing the bicomponent or biconstituent fibers a relatively non-indented configuration resulting from contact with a smooth calender roll, whereas the bonds on the opposite side of the fabric exhibit a relatively indented embossed configuration resulting from contact with the patterned calender roll.

In view of the foregoing, Applicant submits that the present invention as now defined in Claims 1-12 and 14-15 patentably distinguish over the prior art of record. Favorable reconsideration by the Examiner and formal notification of the allowance of these claims are respectfully solicited.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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